Mukul Shingwani

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EDUCATION

Indian Institute of Technology, Jodhpur

Nov. 2020 – May 2024

Bachelor of Technology in Artificial Intelligence and Data Science

Current CG: 8.87 (Branch Rank: 2)

Delhi Public School, Dwarka

Mar 2008 – May 2020

 $P ext{-}C ext{-}M$ with Computer Science

Percentage: 94.25

EXPERIENCE

Personal Portfolio Management

- Performed daily portfolio management involving tasks such as portfolio re-balancing and performance management for an amount greater than INR 10,00,000 which has shown a return of 59% in 14 months.
- Adopted strategies like Moving Average and RSI crossovers, Breakout, momentum and scalping trading

PROJECTS

Flood Forecasting and Early warning systems

Feb 2022 – Jun 2022

Python, LSTM, ARIMA, Deep Learning

Github Link

- Delineated selected 14 watersheds in the Godavari Basin and analysis of seasonality and trend of forcing, stage discharge data using Sen Slope Method, Spatial & Temporal plots.
- Implemented ARIMA Model along with Stationarity check, analysis of ACF & PACF plots, and Bi-directional LSTM model for the delineated watershed basin

WebApp for COVID-19 detection using chest X-ray

Apr 2022 – May 2022

Python, CNN, Resnet, Deep Learning

Github Link

- Developed a model to detect COVID-19 from the frontal images of chest X-ray and achieved 93.28% accuracy
- Executed Lung segmentation using U-Net model,made a Scratch VGG model and Implemented multi-modality by concatenating the feature maps from Lung segmented, Non lung segmented and whole X-ray image to classify them
- Applied VGG-19 model and hosted a web application where user would be able to upload X-rays and get the result

WebApp for Flight price prediction

Apr 2022 – Apr 2022

Python, AutoML, sklearn

Github Link

• Developed a Flight price predictor model using Neural Networks to predict prices of flights, achieved a r2-score of 0.87 and deployed the model and website using javascript and Github

CPU Scheduling Algorithms in Operating systems

 $Feb\ 2022-Feb\ 2022$

C++, python, $Operating\ systems$

Github Link

• Implemented FCFS, SJF, Non-preemptive SJF, Round Robin and priority schdeuling algorithms and used them to find ATT, AWT and ART to do comparative analysis

MedBuddy App

Oct 2021 – Dec-2021

Flutter, dart, Firebase, Firestore

Github Link

- Developed an application for slot booking and scheduling for medical assistance involving authentication and database management of user and doctor using Firebase and Firestore
- Created Interactive and user friendly UI for patient and doctor's interface with multiple features for user's ease

Position of Responsibilities

Internship Representative, Placement and Internship Cell Student Guide, Student Well-being Committee Associate Head, Entrepreneurship cell

May 2022 - Present Dec 2021 - Present

Dec 2021 - Jul 2022

TECHNICAL SKILLS

Skills: Machine Learning, Competitive Programming, App Development, Web Development Languages and frameworks: C, C++, Python, MySQL, HTML, CSS, Javascript, Django, Flutter, Firebase Libraries: pandas, NumPy, Matplotlib, Seaborn, Sklearn, PyTorch, Keras/tensorflow, NLTK

ACADEMIC ACHIEVEMENTS

- Achieved AIR 3335 in JEE Advanced 2020
- Achieved 2nd rank(A grade) in Pattern recognition and Machine Learning course under Dr. Richa Singh
- Achieved 3rd rank(A grade) in Data structures and algorithms course under Dr. Somitra Sanadhya